Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions of Part 27 of the Commission's Rules	)))	WT Docket No. 99-168

REPLY COMMENTS OF BELL ATLANTIC MOBILE, INC.

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Bell Atlantic Mobile, Inc. ("BAM")[1] submits these reply comments on the Commission's Notice of Proposed Rulemaking in this proceeding (FCC 99-97, released June 3, 1999) ("Notice").

SUMMARY

This proceeding offers a tremendous opportunity for the Commission to remedy the shortage in useable spectrum that is available for third-generation ("3G") terrestrial mobile radio services, and to promote the rapid deployment of 3G to serve the public. The record in this and other dockets clearly demonstrates the growing need for more spectrum for mobile communications. While other services can use a wide variety of bands, mobile uses are far more effectively provided on

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1 BAM is the managing general partner of Cellco Partnership, which holds or has interests in licenses to provide cellular radiotelephone service in nineteen states and the District of Columbia.

lower frequencies such as the 746-764 and 776-794 MHz bands. The Commission should thus take three principal actions: (1) License this spectrum exclusively for 3G terrestrial mobile services, and not authorize broadcast use of the bands. (2) Award licenses by using the 52 Major Economic Areas as the geographic license service areas. (3) Allow all interested parties to bid for and acquire licenses, without imposing unnecessary and counterproductive restrictions on ownership or eligibility. These steps will promote prompt and effective use of this spectrum and will best serve the public interest.

I. LICENSING RULES SHOULD ENSURE THAT THE 700 MHz BANDS ARE USED FOR 3G TERRESTRIAL MOBILE SERVICES.

Terrestrial Mobile Services Need More Spectrum to Meet Rapidly Growing Demand. The record in this and other proceedings provides substantial evidence demonstrating the need for additional spectrum to support 3G services:

- Mobile service providers as well as equipment manufacturers have identified a clear need for more lower-band spectrum to meet the rapidly growing mobile communications needs of the public.[2]
- This summer, the WRC-2000 Advisory Committee Informal Working Group on Mobile Service Matters Including IMT-2000

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2 E.g., AirTouch Comments at 9; Intek Global Comments at 2 ("Given the congestion in existing frequency bands and the scarcity of alternatives for mobile service providers, frequency bands below 1000 MHz should be reserved as a premium for mobile services.").

(IWG-1) determined that 160 MHz of additional spectrum will be needed to accommodate future terrestrial mobile services.[3]

- The Commission's June 1999 report on the CMRS industry documented the staggering increases in the public's demand for mobile radio services in all parts of the nation.[4] That demand is not merely resulting in sharply higher minutes of use; it is transforming the nature of the services that CMRS providers must offer to compete. For example, mobile data services, which are growing at geometric rates, place greater demands on wireless networks.

- The record in the spectrum caps proceeding[5] also confirmed that existing spectrum is not adequate to meet the rapidly growing demand for wireless services. Cellular and PCS networks were configured based on the concept of frequency reuse for short-duration communications, but that concept does not apply when wireless networks are used for longer-duration spectrum-intensive broadband communications. Experts predict there will be an explosion in the use of these services over the next decade that is driven by consumer demand for more bandwidth and the convenience of mobility.[6]

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3 Public Notice, "The FCC's Advisory Committee for the 2000 World Radiocommunication Conference Offers Additional Draft Proposals on WRC-2000 Issues," DA 99-1364 (released July 14, 1999).

4 Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, Fourth Report, June 24, 1999 ("Fourth CMRS Competition Report").

5 1998 Biennial Review – Spectrum Aggregation Limits for Wireless Telecommunications Carriers, Notice of Proposed Rulemaking, WT Docket No. 98-205 (released December 10, 1998) ("Spectrum Cap NPRM").

6 E.g., Comments of Bell Atlantic Mobile, Inc., WT Docket No. 98-205, filed January 25, 1999, at 24, and attached Declaration of Dr. Charles L. Jackson at ¶¶ 3, 16. See also Comments of Cellular Telecommunications Industry Association, GTE Service Corp., Omnipoint Communications, Inc. and Western Wireless Corporation, WT Docket No. 98-205, filed January 25, 1999.

- In response to the Commission's invitation for comment on issues facing the deployment of 3G, numerous parties showed there was a need for significant additional spectrum to meet the sharply growing future needs for mobile voice and data communications nationwide.[7]

Third generation systems promise to provide mobile consumers with improved voice, messaging and data services as well as a plethora of new spectrum-intensive services that cannot be supported with current first or second generation systems. These include high-speed Internet access, data networking, video telephony, and a host of multimedia applications. The uncontradicted record shows that 3G services need more spectrum.

Licensing The Spectrum for 3G Services Will Promote Convergence. By earmarking the 746-764 and 776-794 MHz bands for 3G, the Commission will promote its key goal of encouraging CMRS-landline competition and convergence. The Commission has found that convergence of wireless and landline services benefits competition in communications markets and offers the public access to a broader array of options to meet their needs.[8] Convergence, however, depends on

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7 Spectrum Issues Related to Third Generation Wireless/IMT-2000, Report No. IB 98-48, DA 98-1703, Comments of Bell Atlantic Mobile, Inc., Personal Communications Industry Association, SBC Wireless, Inc., and U S West, Inc., filed September 30, 1998.

8 Spectrum Cap NPRM at ¶ 5: "We are also committed to bringing competition to local telecommunications markets . . . . In this regard, we wish to ensure that there are no regulatory impediments to the evolution of wireless carriers into more effective competitors vis-a-vis the local wireline telephone companies."

CMRS providers' ability to offer broadband wireless services, and broadband services are spectrum-intensive. Internet services at speeds available through landline modems, for example, take far more bandwidth than most cellular or PCS carriers can dedicate today. Wireless carriers have had to deploy most of their spectrum to meet sharply increased demand for mobile voice services, leaving little spectrum available for widespread deployment of other spectrum-intensive applications.[9] By allocating this spectrum for 3G, the Commission will help to encourage wireless-landline conversion.

3G Mobile Services Are the Best Use of the 700 MHz Bands. This docket presents a clear opportunity to make ideal spectrum available for terrestrial mobile services. Expert information in the spectrum caps docket showed that the use of bands below 500 MHz requires larger antennas that are not feasible for portable communications, and this spectrum does not propagate well into buildings, severely limiting its use for 3G. On the other hand, spectrum above 3 GHz is more prone to blocking of radio signals by trees, buildings and other obstructions.[10] Fixed services can use higher bands and still avoid blocking because they can be deployed by locating antennas to maximize line-of-site transmissions. But this option is not feasible for a mobile network because it must be able to function anywhere and connect people who are on the move. In addition, the 700 MHz bands are located in

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9 BAM Comments, WT Docket No. 98-205, filed January 25, 1999, at 22-27.

10 Id., Declaration of Dr. Charles L. Jackson.

close proximity to the 800 MHz bands used for existing cellular networks. This will facilitate the evolution of second generation cellular services, handsets and other equipment to 3G. For these reasons, BAM agrees with other parties that the 700 MHz bands are particularly well suited for future mobile services.[11]

II. BROADCAST USE SHOULD NOT BE AUTHORIZED.

BAM also agrees with those commenters that urge that the 700 MHz band should not be licensed for radio or television broadcasting but should be reserved exclusively for mobile use.[12]

First, the record reveals the technical problems which would arise were the Commission to attempt to mix broadcast and mobile services. As the Commission has itself recognized, the use of this band for broadcast services "is likely to cause

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11 AirTouch Comments at 10-11; BAM Comments, WT Docket No. 98-205, at 24-25.

12 Motorola, Inc. Comments at 9 ("any broadcasting operations in the same geographic area would lead to a drastically reduced service areas and an unrealizable business plan" for mobile carriers); Industrial Telecommunications Ass'n Comments at 11-12 (opposing broadcast use; band sharing by mobile licensees and broadcasters is not feasible); Intek Global Comments at 2-3 (bands should be allocated "strictly for mobile services"; shared broadcast and mobile use would be incompatible and impractical); U S West Comments at 6-9 (broadcast use presents interference concerns that "cannot be satisfactorily resolved"); Rural Telecommunications Group Comments at 10-11 (broadcast use "will inevitably interfere" with mobile services).

interference problems with other commercial applications, especially low-power mobile applications."[13]

Second, licensing spectrum for broadcast use requires the Commission to address many fundamentally different public policy issues than are presented by a mobile service allocation. For example, broadcasters are obligated to broadcast many different types of programs to meet the needs and interests of their community. They have additional public service responsibilities arising from their "public trustee" status. Mobile services, by contrast, bear distinct common carrier obligations. The Communications Act and the Commission's own rules each impose very different requirements on broadcast and mobile services which would have to be harmonized were the two services permitted to share the 700 MHz bands. The entirely different ownership requirements that apply to the broadcast and mobile services would also make crafting bidding and eligibility rules for the auction of the spectrum extremely complex. BAM agrees with Motorola that "attempting to create a set of rules to match the widely divergent market and regulatory requirements for additional broadcast, as well as mobile and fixed operations, would make the band virtually useless to all concerned."[14]

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13 Reallocation of Television Channels 60-69, the 756-806 MHz Band, Report and Order, 12 FCC Rcd 22962 (1997).

14 Motorola Comments at 8.

Third, allowing broadcast use of the 700 MHz bands would completely nullify and undermine the Commission's landmark decision to move broadcasting out of those bands. The Commission reclaimed television channels 60-69, occupying 700 MHz spectrum, for the express purpose of licensing other services. The television broadcast service was relocated to Channels 2 – 51 to free up the higher channels for other uses.[15] It would make no sense now to permit broadcast use of the very same channels that the Commission has just removed from broadcast use.

Fourth, there is no evidence in the record establishing a need for additional broadcast spectrum. To the contrary, television broadcast stations have been given (for free) a new block of 6 MHz and are permitted to use it to offer a wide variety of video and other services. They may continue to operate both this new channel block, and their existing 6 MHz block, until well into the next decade.[16] Last week, the Commission loosened its broadcast ownership rules, permitting broadcasters to hold two television stations (and their two separate 6 MHz channel bands) in the same market – effectively giving many owners the right to hold 12 MHz of unencumbered overlapping spectrum in most of the nation's largest markets.[17] There can be no rational basis, given these actions, to license still more spectrum for broadcast use.

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15 Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, Fifth Report and Order, 12 FCC Rcd 12809 (1997).

16 Id.

17 Review of the Commission's Regulations Governing Television Broadcasting, Report and Order, FCC 99-209 (released August 6, 1999).

III. 700 MHz LICENSES SHOULD BE AWARDED BASED ON MAJOR ECONOMIC AREAS.

BAM agrees with comments that urge the Commission to establish service areas based on large geographic areas,[18] and advocates the use of the 52 Major Economic Areas ("MEAs"). The Commission already has experience with MEAs, which were used for awarding WCS licenses. The Commission adopted MEAs because it correctly concluded that licensing carriers to serve relatively large areas encourages rapid deployment of service, promotes interoperability and the setting of standards, and allows economies of scale that will encourage the development of low cost equipment.[19]

Recent developments in the CMRS market confirm the Commission's analysis that awarding licenses for large service areas is the best way to promote rapid deployment of a new service. The efficiencies and economies of scale resulting from expanding a carrier's footprint are driving an increasing number of mobile carriers toward assembling either regional or national service areas, and regional and national "single rate" pricing plans are proliferating.[20] To compete effectively

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18 E.g., AirTouch Comments at 18-20.

19 Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, Report and Order, 12 FCC Rcd 10785 at ¶ 55 (1997).

20 The Commission has documented both trends. Fourth CMRS Competition Report at 11-15. It concluded, "Operators with large footprints can achieve economies of scale and increased efficiencies compared to operators with

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in light of these trends, providers offering service on the 700 MHz bands will need to cover large areas.[21] MEAs strike the right balance between providing carriers with sufficient contiguous area to be able to compete effectively, without creating the problems and disincentives that many carriers (particularly small companies or new entrants) would face were they forced to bid on larger regional or nationwide licenses.[22]

BAM also agrees with parties who advocate that the Commission should also allow bidders to aggregate licenses across multiple markets.[23] Restrictions on the number of markets that a single entity can bid on inevitably reduces the value of a license. There is no reason to limit aggregation given the ample evidence that substantial CMRS competition already exists. The record also contains no evidence that would support imposing such restrictions.

(...continued)

smaller footprints. The need for this increased size was exacerbated in the past year by the introduction and success of AT&T's DOR (digital one-rate) plan and, in particular, its low-cost roaming feature." Id. at 15-16.

21 Walt Disney Company urges that "Designated Market Areas" be the licensed service areas. Comments at 6. This should be rejected. DMAs were created by the Neilsen Company and are based on television viewing habits; they have never been used for mobile services. Many are extremely small and encompass only a few counties. In addition, given that broadcast use of the 700 MHz bands should be rejected, there is no rational basis to use DMAs.

22 Permitting market aggregation also obviates the need to award licenses by even larger regional or national service areas. Parties that are interested in acquiring such broad service areas can simply acquire multiple MEAs and combine them to assemble the footprint they desire to serve.

23 E.g., AirTouch Comments at 24.

IV. ELIGIBILITY TO HOLD LICENSES SHOULD NOT BE RESTRICTED.

BAM agrees with other parties that eligibility to bid on and acquire licenses for the 746-764 and 776-794 MHz bands should not be restricted by the existing "spectrum cap" rule for certain CMRS services.[24] Moreover, the Commission should not impose any other limits on how much of this spectrum a single entity can hold.

First, in several other spectrum allocation proceedings, the Commission has declined to impose spectrum eligibility or ownership limits, citing among other reasons the growing number of competing mobile service providers.[25] The grounds for these prior decisions are equally applicable here. There is no reason to reverse course. In fact, the strong pro-competitive trends in mobile services to which the Commission has repeatedly pointed in the Fourth CMRS Competition Report and elsewhere supply an even clearer basis to continue an open eligibility policy and extend it to the 700 MHz band.

Second, the Commission is reconsidering the need for any CMRS spectrum aggregation rule at all in the spectrum cap rulemaking. Given that the entire

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24 Both large and small mobile providers oppose extending the spectrum cap to these bands. E.g., AirTouch Comments at 22-24; Rural Telecommunications Group Comments at 9-10.

25 E.g., Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Services, Report and Order, 12 FCC Rcd 10785 (1997).

concept of limiting eligibility based on the amount of spectrum held by an entity is being reassessed, there is no basis to extend that concept to the new service.

Third, the record in that rulemaking convincingly showed that restricting eligibility to hold spectrum was unnecessary and would only impair development of new services. That record should drive the result in this proceeding, too. BAM, for example, submitted a declaration from two economists who explained why a cap is not needed to guard against any of the concerns that originally motivated adoption of a cap: market failure, foreclosure of competition or other competitive harm. This economic analysis also showed that removing the cap will not undercut the market forces that have benefited consumers and that will preserve competition.[26] Even if an entity were to attempt to foreclose CMRS competition by aggregating spectrum, government and private remedies are available to squelch any such attempt.

The record also showed that continuing the CMRS spectrum cap would discourage innovation in the new spectrum-intensive technologies that wireless providers must deploy if they are to offer competitive services such as local telephony, Internet access and data services.[27] Extending any limit on eligibility to the 700 MHz bands would exacerbate these problems.

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26 WT Docket No. 98-205, BAM Comments, Declaration of Robert W. Crandall and Robert H. Gertner.

27 WT Docket No. 98-205, Comments of Rural Telecommunications Group at 5; GTE at 20; AirTouch Communications at 16; BellSouth Comments 10-11, filed January 25, 1999.

CONCLUSION

The Commission should adopt licensing rules for the 700 MHz bands which ensure that the bands are efficiently used to meet the substantial need for 3G terrestrial mobile services. Limiting permissible service to 3G, adopting MEAs as the license service areas, and allowing open eligibility for all interested parties to bid on this spectrum are the right actions to promote the use of the 700 MHz bands to best serve the public.

Respectfully submitted,

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